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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Pepijn Martens

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EXAMINER

YAN, REN LUO

ART UNIT

PAPER NUMBER

2854

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/541,208

Applicant(s)

MARTENS ET AL.

Examiner

Ren L. Yan

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2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim 19 is objected to because it is identical to claim 7.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1, 2, 5, 6, 17 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Calace(6,603,711).

Calace teaches a watch assembly comprising a case housing the watch mechanism (Figs. 1 and 4) and the display screen, actuator means 15a for actuating the mechanism external to the case and connected to the mechanism by connection means and a wristlet supporting the actuator means, the connection means, and the case, the case being placed on the back of the hand, the assembly being characterized in that the wristlet comprises a flexible piece comprising: a) a proximal portion for surrounding the wrist; b) a distal portion 10 for surrounding at least the first phalanx at the base of the index finger; and c) an intermediate portion 11 for extending over the back of the hand between said proximal and distal portions and supporting the case. Regarding claim 2, the recitation of “possibly also the middle phalanx of the

index finger” is not a positive structural requirement and therefor is not given patentable weight. If the wearer of the timekeeping device has a small hand, the middle phalanx of the index finger is possibly covered by distal portion of the glove. With respect to claims 5, 6, 17 and 18, Calace teaches the use of flexible elastomer material for the actuator and connection means with the connection means and the actuator means integrated therein as recited.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calace in view of dePoortere(6,144,620).

Calace teaches all that is claimed except that only one actuator means is used at the distal portion to be actuated by the thumb of the user. dePoortere teaches a time piece including a distal portion 112 for surrounding the first and middle phalanx of the user's index finger and has two actuator means 106 and 108 thereon to be actuated by the thumb of the user and a connection means 110 to connect the distal portion 112 to the wristlet of the time piece. See Figs. 1 and 2 in dePoortere for example. The two actuator means 106 and 108 are positioned laterally and longitudinally on the distal portion and also mounted transversely on the distal portion as recited and each one is for a distinct time control function. In view of the teaching of dePoortere, it would have been obvious to those having ordinary skill in the art to provide the

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timekeeping device of Calace with more actuator means positioned at the distal portion to be actuated by the thumb as taught by dePoortere in order to improve the operability of the timekeeping device and provide more control functions with the use of the thumb.

Claims 7, 8, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calace in view of Yaniger, US 5,302,936 (hereafter Yaniger).

Regarding claims 7 and 19, Calace teaches all that is claimed with the exception that the actuator means are constituted by a powder which is locally mixed in the layer of flexible material and which presents electrical resistance that varies as a function of the pressure that is exerted thereon. Yaniger teaches a conductive particulate force transducer that uses a powder (16, Fig. 1) which is locally mixed in the layer of flexible material ("flexible," col. 2, 1. 34) and which presents electrical resistance that varies as a function of the pressure that is exerted thereon (col. 2, 11.29-33). Such a transducer has stable, predictable performance characteristics independent of manufacturing conditions, and a small cost of manufacture (col. 1, 11. 51-57). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Calace wherein the actuator means are constituted by a powder which is locally mixed in the layer of flexible material and which presents electrical resistance that varies as a function of the pressure that is exerted thereon, because Yaniger teaches that this type of actuator has stable, predictable performance characteristics independent of manufacturing conditions, and a small cost of manufacture.

With respect to claims 8 and 20, Calace teaches all that is claimed with the exception that the actuator elements are formed by silkscreen printing. Yaniger teaches a conductive particulate force transducer that uses a powder, wherein the actuator elements are formed by silkscreen

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printing (col. 1, 1. 65). Such, a transducer has stable, predictable performance characteristics independent of manufacturing conditions, and a small cost of manufacture (col. 1, 11. 51-57).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Calace wherein the actuator elements are formed by silkscreen printing, because Yaniger teaches that this type of actuator has stable, predictable performance characteristics independent of manufacturing conditions, and a small cost of manufacture.

Claims 9, 10, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calace in view of Yang, US 6,991,364 B2 (hereafter Yang).

Regarding claim 9, Calace teaches all that is claimed with the exception that the connection means are metal threads, wires, or tracks embedded in the layer of flexible material. Yang teaches a same-hand control device of a multi-function watch (col. 1, 1. 6), wherein connection means between actuators and the watch are metal threads, wires, or tracks embedded in the layer of flexible material (see wires, Fig. 9). Such wires allow a device to be controlled by the hand of a user that is associated with the same limb to which the device is secured (col. 1, 11. 40-42). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Calace wherein the connection means are metal threads, wires, or tracks embedded in the layer of flexible material, because Yang teaches that wires allow a device to be controlled by the hand of a user that is associated with the same limb to which the device is secured.

Regarding claim 10, Calace teaches all that is claimed with the exception that the connection means are metal textile threads, hidden at least in part in an element for finishing the side of the wristlet. Yang teaches a same-hand control device of a multi-function watch (col. 1,

1. 6), wherein the connection means are metal textile threads, hidden at least in part in an element for finishing the side of the wristlet (see wires, Fig. 9). Such wires allow a device to be controlled by the hand of a user that is associated with the same limb to which the device is secured (col. 1, 11.40-42). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Calace wherein the connection means are metal textile threads, hidden at least in part in an element for finishing the side of the wristlet, because Yang teaches that wires allow a device to be controlled by the hand of a user that is associated with the same limb to which the device is secured.

Regarding claim 14, Calace teaches all that is claimed with the exception that at least one actuator element is disposed on the intermediate portion or the proximal portion of the wristlet, at a distance from the case. It has been held that mere rearrangement of parts is not sufficient to patentably distinguish an invention over the prior art. See MPEP § 2144.04(VI)(C).

Yang teaches a same-hand control device of a multi-function watch (col. 1, 1. 6), with actuators provided in a variety of places (compare Figs. 7, 9 and 11). Such actuators allow a device to be controlled by the hand of a user that is associated with the same limb to which the device is secured (col. 1, 11.40-42). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to further modify Calace at least one actuator element is disposed on the intermediate portion or the proximal portion of the wristlet, at a distance from the case, because Yang teaches that a variety of actuator positions are possible, because a person having ordinary skill in the art would have been motivated by the nature of the problem to be solved, i.e. the optimal ergonomic arrangement for easy operation, to rearrange the actuators to find their optimal placement.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Calace. Calace teaches all that is claimed as discussed in the rejection of claim 1 above. However, Calace does not teach a case with an oval shape. It has been held that mere changes in shape without changing the functionality of the device are not sufficient to patentably distinguish an invention over the prior art. See MPEP § 2144.04(IV)(B). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Calace so that the shape of the case was an oval, because a person having ordinary skill in the art would know that an oval is an acceptable equivalent shape to other shapes, and one that would provide a suitable watch that would allow time information to be presented to the user.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Calace in view of Olsson, US 4,244,044 (hereafter Olsson).

Calace teaches all that is claimed with the exception that the wristlet includes an opening in the intermediate portion giving access to the back face of the case. Olsson teaches a watch with a removable back plate, which is necessary for battery replacement and service access (col. 1, 11.30-33). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Calace wherein the wristlet includes an opening in the intermediate portion giving access to the back face of the case, because Olsson teaches that modern watches require accessibility from the back for battery replacement and servicing, and an opening in the wristlet would facilitate such access.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Calace in view of Doynov(2002/0163495).


Regarding claim 13, Calace teaches all that is claimed with the exception that the distal portion of the wristlet is designed to surround the proximal phalanx and the middle phalanx and includes a transverse cutout situated in register with the joint between the proximal and middle phalanges of the index finger. Doynov teaches a multi-functional ergonomic interface for operating electronic equipment including a wristlet and the distal portion of the wristlet is designed to surround the proximal phalanx and the middle phalanx and includes a transverse cutout situated in register with the joint between the proximal and middle phalanges of the index finger. (see cutout in item 11 in Fig. 1, and item 11 on finger in Fig. 2). It would have been obvious to those having ordinary skill in the art at the time of invention to modify the wristlet of Calace with the distal portion designed to surround the proximal phalanx and the middle phalanx and includes a transverse cutout situated in register with the joint between the proximal and middle phalanges of the index finger in order to provide better support for the distal portion on the finger and at the same time provide comfort to the finger so it can bend freely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ren L. Yan whose telephone number is 571-272-2173. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ren L Yan
Primary Examiner
Art Unit 2854

Ren Yan
May 31, 2007